

PUBLICATION NUMBER : 57027602
PUBLICATION DATE : 15-02-82

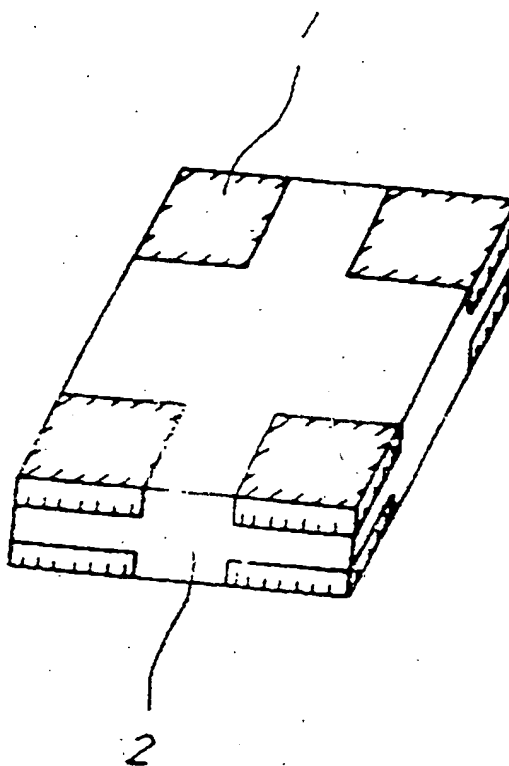
APPLICATION DATE : 18-07-80
APPLICATION NUMBER : 55097516

APPLICANT : HITACHI LTD;

INVENTOR : YATSUNO KOMEI;

INT.CL. : B23B 27/14 B22F 7/06 B23P 15/28
C04B 37/02

TITLE : CUTTING TOOL



ABSTRACT : PURPOSE: To obtain a cutting tool excellent in oxidation resistance, hardness and abrasion resistance by using an antiabrasive material in the cutting tip of the antiabrasive material, such as sintered silundum, or extra-hard alloy.

CONSTITUTION: Beryllium oxide powder of mean particle size no larger than $10\mu\text{m}$ is added at a rate of 0.05–20wt% to silundum powder of mean particle size no larger than $10\mu\text{m}$; they are mixed and formed into a body under a pressure of $1,000\text{kg/cm}^2$. Thus molded body is placed in a graphaite die and undergoes hot press processing in vacuum to give a sintered body. This sintered silundum body is processed into a certain form 1 and metallized onto a cutting tip 2 made from extra-hard alloy with the aid of Ni-W powder. Thus an excellent cutting tool is provided.

COPYRIGHT: (C)1982,JPO&Japio